IN THE CLAIMS:

1. (Currently amended) A ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound the expression of which creates an autocrinic or anti-autocrinic loop; and

a reporter system that is activated or inactivated upon the creation of said autocrinic or anti-autocrinic loop.

2. (Original) The eukaryotic cell of claim 1 wherein the cell is any eukaryotic cell other than yeast.

3. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1 wherein the chimeric receptor is a multimeric or multimerizing receptor.

4. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.

5. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1 wherein said reporter system is activated as a result of a ligand binding to said chimeric receptor.

6. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1 wherein a cytoplasmic part of the chimeric receptor is a cytoplasmic part of at least one interferon receptor subunit.

7. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1 wherein the reporter system comprises *E. coli* xanthine-guanine phosphoribosyl transferase (gpt).

8. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 7 wherein said reporter system is placed under control of a 6-16 reporter.

9. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 4 wherein said second recombinant gene is inserted after an SRa or HEF1a promoter.

10. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1 wherein the cell is a 2fTGH cell.

11. (Currently amended) A method of screening for a compound that inhibits the binding of a ligand with the extracellular part of a chimeric receptor and/or ~~with~~ inhibits the signaling pathway of the cytoplasmic part of a chimeric receptor, the method comprising:
providing the ~~eukaryotic~~ mammalian cell of claim 1;
contacting said ~~eukaryotic~~ mammalian cell with said compound and said ligand; and
selecting cells in which the cell's reporter system is inactivated;
thus screening for the compound that inhibits the binding of the ligand with the extracellular part of the chimeric receptor ~~or with~~ and/or inhibits the signaling pathway of the cytoplasmic part of the chimeric receptor.

12-13. Canceled.

14. (Currently amended) A kit, comprising a ~~eukaryotic~~ mammalian host cell and one or more transformation vectors, which upon the transfection of said cell with said vector or vectors, results in the ~~eukaryotic~~ mammalian cell of claim 1.

15. (Currently amended) A method of screening for ligands of an orphan receptor comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a library of recombinant genes encoding at least one compound, the expression of which creates an autocrinic loop;

a reporter system that is activated upon the creation of said autocrinic loop;

measuring binding of a ligand to the chimeric receptor;

selecting cells in which the cell's reporter system is activated; and

identifying the ligand corresponding to the at least one compound that activated said autocrinic loop;

thus screening for the ligands of ~~an~~ the orphan receptor.

16. (Previously presented) The method according to claim 24 wherein said series of compounds comprise genes encoding said antagonists.

17. Canceled.

18. (Previously presented) The method according to claim 15 wherein said ligands are produced by the autocrinic loop.

19-20. Canceled.

21. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein the chimeric receptor is a multimeric or multimerizing receptor.

22. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.

23. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein said reporter system is activated as a result of a ligand binding to said chimeric receptor.

24. (Currently amended) A method of screening for antagonists inhibiting ligand-receptor binding comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound, the expression of which creates an autocrinic loop;

a reporter system that is activated upon the creation of said autocrinic loop;

reacting a series of compounds with said ~~eukaryotic~~ mammalian cell;

contacting the mammalian cell with a ligand of the chimeric receptor;

assaying the inhibiting activity of the ligand-receptor binding of each element of said series of compounds by assaying the deactivation of the reporter system;

comparing the inhibiting activity of said series of compounds to a positive or a negative control; and

based on said deactivation, determining the presence of an antagonist.

25. (Currently amended) A method of screening for antagonists inhibiting ligand-receptor binding comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound, the expression of which creates an anti-autocrinic loop;

a reporter system that is deactivated upon the creation of said anti-autocrinic loop;

contacting the mammalian cell with a ligand of the chimeric receptor;

assaying the inhibiting activity of the ligand-receptor binding by assaying the activation of the reporter system;

comparing the inhibiting activity of said series of compounds to a positive or a negative control; and

determining the presence of an antagonist that creates said anti-autocrinic loop by scoring the deactivation of the reporter.